



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street  
San Francisco, CA 94105-3901

**JUL 07 2015**

Wes Bush  
Chief Executive Officer and President  
Northrop Grumman Aerospace Systems  
1 Space Park Boulevard  
Redondo Beach, California 90278-1001

**Certified Mail**  
**7001 0320 0002 0254 4745**

Dear Mr. Bush:

Region IX of the United States Environmental Protection Agency ("EPA") is issuing this letter to determine the Clean Air Act ("CAA" or "Act") compliance status of Northrop Grumman Aerospace Systems ("NGAS") with respect to the Mandatory Greenhouse Gas Reporting Rule at 40 C.F.R. Part 98<sup>1</sup> (hereafter "the *GHG*<sup>2</sup> Reporting Rule") and with the portion of the *GHG* Reporting Rule that addresses reporting by Electronics Manufacturing at 40 C.F.R. Part 98, Subpart I, 40 C.F.R. §§ 98.90-109. Pursuant to Section 114 of the Act, 42 U.S.C. § 7414, NGAS is hereby required to provide the following information requested in this letter related to NGAS' *facility*<sup>3</sup> located at 1 Space Park Boulevard, Redondo Beach, California. In responding to this request, please use the instructions provided in Enclosure 1.

1. Please state whether NGAS' *facility* uses any of the production processes listed in 40 C.F.R. §98.90 (a)(1) through (a)(5) for the manufacture of products, including but not limited to: micro-electro-mechanical systems ("MEMS"), liquid crystal displays ("LCDs"), photovoltaic cells ("PV") or semiconductors (including light-emitting diodes ("LEDs")).<sup>4</sup>
2. If your answer to Question 1 is affirmative, please state, for each calendar year from 2011 through 2014, whether the *facility*'s total annual *GHG* emissions met or exceeded the total

<sup>1</sup> The *GHG* Reporting Rule is a federal requirement that is distinct from California's reporting of *GHGs* under the California Global Warming Solutions Act (AB 32, 2006). The following is the link to the *GHG* Reporting Rule:  
[http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&tpl=/ecfrbrowse/Title40/40cfr98\\_main\\_02.tpl](http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&tpl=/ecfrbrowse/Title40/40cfr98_main_02.tpl).

<sup>2</sup> All terms in italics are defined at 40 C.F.R. § 98.6 or 40 C.F.R. § 98.98.

<sup>3</sup> For purposes of differentiating a *facility* from a *fab*, a "*Fab* means the portion of an electronics manufacturing facility located in a separate physical structure that began manufacturing on a certain date." 40 C.F.R. § 98.98.

<sup>4</sup> The electronics manufacturing source category consists of (1) Any electronics production process in which the etching process uses plasma-generated fluorine atoms and other reactive fluorine-containing fragments that chemically react with exposed thin-films (e.g., dielectric, metals) or substrate (e.g., silicon) to selectively remove portions of material. (2) Any electronics production process in which chambers used for depositing thin films are cleaned periodically using plasma-generated fluorine atoms and other reactive fluorine-containing fragments. (3) Any electronics production process in which wafers are cleaned using plasma generated fluorine atoms or other reactive fluorine-containing fragments to remove residual material from wafer surfaces, including the wafer edge. (4) Any electronics production process in which the chemical vapor deposition (CVD) process or other manufacturing processes use N<sub>2</sub>O. (5) Any electronics manufacturing production process in which fluorinated heat transfer fluids are used to cool process equipment, to control temperature during device testing, to clean substrate surfaces and other parts, and for soldering (e.g., vapor phase reflow). 40 C.F.R. § 98.90(a).

annual *GHG* emission reporting threshold of 25,000 metric tons of *carbon dioxide equivalent* (*CO<sub>2e</sub>*), according to the calculation methodology set forth at 40 CFR § 98.91.<sup>5</sup>

3. If NGAS' *facility* emitted at least 25,000 metric tons *CO<sub>2e</sub>* in any calendar year from 2011 through 2014 (as calculated according to the methodology set forth in 40 C.F.R. § 98.91), and if a designated representative for the *facility* has not submitted an annual report for any such year as required by 40 C.F.R. §§ 98.2 and 98.91, please report the data specified at 40 C.F.R. § 98.3 and at 40 C.F.R. §§ 98.92 and 98.96 for those calendar years, in accordance with 40 C.F.R. Part 98, Subparts A and I, and submit them through e-GGRT.
4. For any calendar year from 2011 through 2014 for which a designated representative<sup>6</sup> for the *facility* has submitted an annual *GHG* report using EPA's electronic *GHG* Reporting Tool ("e-GGRT"),<sup>7</sup> please provide the *facility* name as entered into e-GGRT, the *GHG* Reporting Program identification number assigned to the *facility* by e-GGRT, and the year(s) for which an annual *GHG* report had been submitted.

NGAS shall submit its response to this request postmarked no later than forty-five (45) calendar days after receipt of this letter. All information submitted in response to this request must be certified in a signed, separate statement as true, correct, accurate, and complete, to the best of his/her knowledge, by an individual with sufficient knowledge and authority to make such representations on behalf of NGAS (see Enclosure 2).

If NGAS seeks to withhold any document(s) based on a claim of attorney-client communications privilege or the attorney work product doctrine in its response to this information request, NGAS shall provide with its response a privilege log for each document containing the following information: (i) the date, author(s), every individual to whom the document was originally sent, every individual who subsequently acquired the document, the purpose for which the document was sent to or obtained by those individuals, and the employment titles of the authors and recipients; (ii) the subject matter of the document; (iii) the privilege claimed for the document and all facts supporting the claim of privilege; (iv) the primary purpose(s), including the business purposes, for which the document was made; (v) the question(s) in this information request to which the document is responsive to; and (vi) all facts contained in the document that are responsive to a question in this information request.

The responsive information shall be accompanied by a cover letter sent via certified mail with return receipt requested to the following address:

Ms. Kathleen H. Johnson  
Director, Enforcement Division  
U.S. Environmental Protection Agency  
75 Hawthorne Street  
San Francisco, CA 94105

Attn: Andrew Chew (ENF-2-1)

<sup>5</sup> The GHG Reporting Program Applicability Tool can help you calculate emissions against the threshold (<http://www.epa.gov/ghgreporting/help/tool2014/index.html>).

<sup>6</sup> See 40 C.F.R. § 98.4 for the authorization and responsibilities of the designated representative.

<sup>7</sup> See <http://www.epa.gov/ghgreporting/reporters/datasystem/index.html> for information on e-GGRT.

Please be advised that under Section 113(a) of the Act, 42 U.S.C. § 7413(a), failure to provide the information and documents required by this letter may result in an order requiring compliance, an order assessing an administrative penalty, or a civil action for appropriate relief. Section 113(b) of the Act, 42 U.S.C. § 7413(b), provides for the assessment of a civil penalty, which has been adjusted for inflation to \$37,500 per day, for each violation of the Act. *See* 40 C.F.R. § 19.4 (for penalties effective after January 12, 2009). In addition, Section 113(c) of the Act, 42 U.S.C. § 7413(c), provides criminal penalties for knowingly making any false material statement in, or omitting material information from, any report required under the Act. The information provided by NGAS may be used by the United States in administrative, civil, or criminal proceedings.

You may, if you desire, assert a confidential business information (“CBI”) claim on behalf of NGAS covering part or all of the information provided to EPA in response to this letter. Any such CBI claim must conform to the requirements set forth in 40 C.F.R. Part 2, particularly 40 C.F.R. § 2.203. You are advised that certain information may be made available to the public pursuant to Section 114(c) of the Act, 42 U.S.C. § 7414(c), and 40 C.F.R. § 2.301, notwithstanding a claim that such information is entitled to confidential treatment. Please note that emission data provided pursuant to Section 114 of the Act, 42 U.S.C. § 7414, is not entitled to confidential treatment under 40 C.F.R. Part 2, Subpart B. Emission data is defined at 40 C.F.R. § 2.301(a)(2). If no claim of confidentiality is received with your reply, the information may be made available to the public without notice to NGAS.

This information request is not subject to review by the Office of Management and Budget under the Paperwork Reduction Act because it is not the “collection of information” within the meaning of 44 U.S.C. §§ 3502(3) and 3518(c)(1), since it is being directed to fewer than ten persons or entities and is being issued during the conduct of an investigation involving the EPA against specific individuals or entities. *See* also 5 C.F.R. §§ 1320.3(c) and 1320.4.

We would also like to take this opportunity to advise you that NGAS may qualify as a “small business” under the Small Business Regulatory Enforcement and Fairness Act (“SBREFA”). Please review the enclosed SBREFA Information Sheet, which is designed to provide information on compliance assistance to entities that may qualify as small businesses as well as to inform them of their right to comment to the SBREFA Ombudsman concerning EPA’s enforcement activities. Please be aware that SBREFA does not eliminate NGAS’ responsibility to respond in a timely fashion to any complaint or information request that EPA may issue or other enforcement action that EPA may take, nor does SBREFA create any new rights or defenses under the law other than the right to comment to the SBREFA Ombudsman.

If NGAS anticipates that it will not be able to respond fully to this request within the time period specified, NGAS must submit a sworn declaration by a responsible corporate/government official within ten (10) calendar days after receipt of this letter specifying what information will be provided by the allotted deadline, describing the efforts that have been/are being undertaken to obtain the remaining other responsive information, and providing a detailed schedule of when such other responsive information will be provided. Upon receipt and based upon such declaration, EPA may extend the time in which to respond to this information request. Also, please contact EPA if NGAS determines that a full response to a particular request for information would require the submission of an extremely large number of documents. Based upon such notification, EPA may modify the scope of the documents required to be produced.

If you have any questions regarding this request, please contact Andrew Chew of my staff at (415) 947-4197 or your attorney can contact Daniel Reich, Office of Regional Counsel, at (415) 972-3911. Thank you for your cooperation in this matter.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kathleen H. Johnson', with a long horizontal flourish extending to the right.

Kathleen H. Johnson  
Director, Enforcement Division

Enclosures

cc: Thomas E. Vice, Northrop Grumman Aerospace Systems  
Jeffrey D. Grant, Northrop Grumman Aerospace Systems  
Edwin Pupka, South Coast AQMD  
Todd Sax, California Air Resources Board

## **ENCLOSURE 1: Instructions**

1. All responsive documents that are not in an electronic format must be:
  - a. provided as an accurate and legible copy in a searchable PDF file format;
  - b. submitted on a disk (CD or DVD media); and
  - c. number stamped in sequential order (BATES stamped)..
2. All responsive documents in an electronic format, such as XL spreadsheets, can be produced in that format.
3. All responsive documents shall be submitted as an attachment to a letter postmarked no later than 45 calendar days after receipt of this letter.
4. Prepare a cover letter that includes a written response to all requests referencing the request number to which each answer or document pertains. In addition, attach to the cover letter the signed certification by a corporate/government official with authority to make such representations for NGAS, described in the body of the above information request letter.
5. To the extent that NGAS has no responsive information or documents for any particular request, this must be explicitly stated in the response.
6. Where documents or information necessary for a response are neither in your possession nor available to you, indicate in your response why such documents or information is not available or in your possession and identify any source that either possesses or is likely to possess such information.
7. To the extent that a document is responsive to more than one request, this must be so indicated and only one copy of the document need be provided.



**ENCLOSURE 2: Certification**

[This Certification is for signature by the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or another executive with authority to perform similar policy or decision-making functions of the corporation.]

Northrop Grumman Aerospace Systems ("NGAS") is submitting the enclosed documents in response to the U.S. Environmental Protection Agency's ("EPA's") request for information, issued pursuant to Section 114(a) of the Clean Air Act, to determine whether the facility is in compliance with the Clean Air Act, specifically the Greenhouse Gas Reporting Rule at 40 C.F.R. Part 98, Subpart I.

I certify that I am fully authorized by NGAS to provide the above information on its behalf to EPA.

I certify under penalty of law that I have personally examined and am familiar with the statements and information submitted in the enclosed documents, including all attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are, to the best of my knowledge and belief, true, correct, accurate and complete. I am aware that there are significant penalties for submitting false statements and information, or omitting required statements and information, including the possibility of fines and imprisonment for knowing violations.

Date: \_\_\_\_\_

Name (Printed): \_\_\_\_\_

Signature: \_\_\_\_\_

Title: \_\_\_\_\_



## U.S. EPA Small Business Resources Information Sheet

The United States Environmental Protection Agency provides an array of resources to help small businesses understand and comply with federal and state environmental laws. In addition to helping small businesses understand their environmental obligations and improve compliance, these resources will also help such businesses find cost-effective ways to comply through pollution prevention techniques and innovative technologies.

### Small Business Programs

[www.epa.gov/smallbusiness](http://www.epa.gov/smallbusiness)  
EPA's Office of Small Business Programs (OSBP) advocates and fosters opportunities for direct and indirect partnerships, contracts, and sub-agreements for small businesses and socio-economically disadvantaged businesses.

### EPA's Asbestos Small Business Ombudsman

[www.epa.gov/sbo](http://www.epa.gov/sbo) or 1-800-368-5888  
The EPA Asbestos and Small Business Ombudsman (ASBO) serves as a conduit for small businesses to access EPA and facilitates communications between the small business community and the Agency.

### EPA's Compliance Assistance Homepage

[www2.epa.gov/compliance](http://www2.epa.gov/compliance)  
This page is a gateway industry and statute-specific environmental resources, from extensive web-based information to hotlines and compliance assistance specialists.

### EPA's Compliance Assistance Centers

[www.assistancecenters.net](http://www.assistancecenters.net)  
EPA's Compliance Assistance Centers provide information targeted to industries with many small businesses. They were developed in partnership with industry, universities and other federal and state agencies.

### Agriculture

[www.epa.gov/agriculture/](http://www.epa.gov/agriculture/)

### Automotive Recycling

[www.ecarcenter.org](http://www.ecarcenter.org)

### Automotive Service and Repair

[ccar-greenlink.org/](http://ccar-greenlink.org/) or 1-888-GRN-LINK

### Chemical Manufacturing

[www.chemalliance.org](http://www.chemalliance.org)

### Construction

[www.cicacenter.org](http://www.cicacenter.org) or 1-734-995-4911

### Education

[www.campuserc.org](http://www.campuserc.org)

### Food Processing

[www.fpeac.org](http://www.fpeac.org)

### Healthcare

[www.hercenter.org](http://www.hercenter.org)

### Local Government

[www.lgean.org](http://www.lgean.org)

### Metal Finishing

[www.nmfr.org](http://www.nmfr.org)

### Paints and Coatings

[www.paintcenter.org](http://www.paintcenter.org)

### Printing

[www.pneac.org](http://www.pneac.org)

### Ports

[www.portcompliance.org](http://www.portcompliance.org)

### Transportation

[www.tercenter.org](http://www.tercenter.org)

### U.S. Border Compliance and Import/Export Issues

[www.bordercenter.org](http://www.bordercenter.org)

### EPA Hotlines, Helplines and Clearinghouses

[www2.epa.gov/home/epa-hotlines](http://www2.epa.gov/home/epa-hotlines)

EPA sponsors many free hotlines and clearinghouses that provide convenient assistance regarding environmental requirements. Some examples are:

### Clean Air Technology Center (CATC) Info-line

[www.epa.gov/ttn/catc](http://www.epa.gov/ttn/catc) or 1-919-541-0800

### Superfund, TRI, EPCRA, RMP and Oil Information Center

[www.epa.gov/superfund/contacts/infocenter/index.htm](http://www.epa.gov/superfund/contacts/infocenter/index.htm) or 1-800-424-9346

### EPA Imported Vehicles and Engines Public Helpline

[www.epa.gov/otaq/imports](http://www.epa.gov/otaq/imports) or 734-214-4100

### National Pesticide Information Center

[www.npic.orst.edu/](http://www.npic.orst.edu/) or 1-800-858-7378

### National Response Center

**Hotline** to report oil and hazardous substance spills - [www.nrc.uscg.mil](http://www.nrc.uscg.mil) or 1-800-424-8802

### Pollution Prevention Information Clearinghouse (PPIC) -

[www.epa.gov/opptintr/ppic](http://www.epa.gov/opptintr/ppic) or 1-202-566-0799

### Safe Drinking Water Hotline -

[www.epa.gov/drink/hotline/index.cfm](http://www.epa.gov/drink/hotline/index.cfm) or 1-800-426-4791

### Stratospheric Ozone Protection Hotline

[www.epa.gov/ozone/comments.htm](http://www.epa.gov/ozone/comments.htm) or 1-800-296-1996

### Toxic Substances Control Act (TSCA) Hotline

[tsc hotline@epa.gov](mailto:tsc hotline@epa.gov) or 1-202-554-1404

### Small Entity Compliance Guides

<http://www.epa.gov/sbrefa/compliance-guides.html>

EPA publishes a Small Entity Compliance Guide (SECG) for every rule for which the Agency has prepared a final regulatory flexibility analysis, in accordance with Section 604 of the Regulatory Flexibility Act (RFA).

### Regional Small Business Liaisons

<http://www.epa.gov/sbo/rsbl.htm>

The U.S. Environmental Protection Agency (EPA) Regional Small Business Liaison (RSBL) is the primary regional contact and often the expert on small business assistance, advocacy, and outreach. The RSBL is the regional voice for the EPA Asbestos and Small Business Ombudsman (ASBO).

### State Resource Locators

[www.envcap.org/statetools](http://www.envcap.org/statetools)

The Locators provide state-specific contacts, regulations and resources covering the major environmental laws.

### State Small Business Environmental Assistance Programs (SBEAPs)

[www.epa.gov/sbo/507program.htm](http://www.epa.gov/sbo/507program.htm)

State SBEAPs help small businesses and assistance providers understand environmental requirements and sustainable business practices through workshops, trainings and site visits.

### EPA's Tribal Portal

[www.epa.gov/tribalportal/](http://www.epa.gov/tribalportal/)

The Portal provides access to information on environmental issues, laws, and resources related to federally recognized tribes.

### EPA Compliance Incentives

EPA provides incentives for environmental compliance. By participating in compliance assistance programs or voluntarily disclosing and promptly correcting violations before an enforcement action has been initiated, businesses may be eligible for penalty waivers or reductions. EPA has two such policies that may apply to small businesses:

### EPA's Small Business Compliance Policy

[www2.epa.gov/enforcement/small-businesses-and-enforcement](http://www2.epa.gov/enforcement/small-businesses-and-enforcement)

This Policy offers small businesses special incentives to come into compliance voluntarily.

### EPA's Audit Policy

[www2.epa.gov/compliance/epas-audit-policy](http://www2.epa.gov/compliance/epas-audit-policy)

The Policy provides incentives to all businesses that voluntarily discover, promptly disclose and expeditiously correct their noncompliance.

### Commenting on Federal Enforcement Actions and Compliance Activities

The Small Business Regulatory Enforcement Fairness Act (SBREFA) established a SBREFA Ombudsman and 10 Regional Fairness Boards to receive comments from small businesses about federal agency enforcement actions. If you believe that you fall within the Small Business Administration's definition of a small business (based on your North American Industry Classification System designation, number of employees or annual receipts, as defined at 13 C.F.R. 121.201; in most cases, this means a business with 500 or fewer employees), and wish to comment on federal enforcement and compliance activities, call the SBREFA Ombudsman's toll-free number at 1-888-REG-FAIR (1-888-734-3247).

Every small business that is the subject of an enforcement or compliance action is entitled to comment on the Agency's actions without fear of retaliation. EPA employees are prohibited from using enforcement or any other means of retaliation against any member of the regulated community in response to comments made under SBREFA.

### Your Duty to Comply

If you receive compliance assistance or submit a comment to the SBREFA Ombudsman or Regional Fairness Boards, you still have the duty to comply with the law, including providing timely responses to EPA information requests, administrative or civil complaints, other enforcement actions or communications. The assistance information and comment processes do not give you any new rights or defenses in any enforcement action. These processes also do not affect EPA's obligation to protect public health or the environment under any of the environmental statutes it enforces, including the right to take emergency remedial or emergency response actions when appropriate. Those decisions will be based on the facts in each situation. The SBREFA Ombudsman and Fairness Boards do not participate in resolving EPA's enforcement actions. Also, remember that to preserve your rights, you need to comply with all rules governing the enforcement process.

*EPA is disseminating this information to you without making a determination that your business or organization is a small business as defined by Section 222 of the Small Business Regulatory Enforcement Fairness Act or related provisions.*